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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/584,638	05/31/2000	Marcos N. Novaes	POU9-2000-0010-US1	4280

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EXAMINER

WON, YOUNG N

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 09/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/584,638

Applicant(s)

NOVAES ET AL.

Examiner

Young N Won

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-7,12-21,23-29,34-43,45-55,60-69,71 and 72 is/are rejected.
- 7) ☒ Claim(s) 8-11,22,30-33,44,56-59 and 70 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Claims 1, and 4-72 have been examined and are pending with this action.
2. Claims 2 and 3 have been cancelled from a preliminary amendment filed on May 6, 2002.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 4-7, 12-19, 21, 23-29, 34-43, 45-55, 60-69, and 71-72 are rejected under 35 U.S.C. 102(e) as being anticipated by Christensen et al. (U.S. 6330605 B1).

INDEPENDENT:

As per claims 1, 25, and 51, Christensen teaches a method (see col.22, line 45), a system (see col.24, line 48), and at least one program storage device readable by a machine tangibly embodying at least one program of instructions executable by the machine to perform a method (col.24, lines 40-43), of providing ordered lists of service addresses (see col.24, lines 14-15), comprising: creating an ordered list of service addresses (see col.6, lines 6-7) to be used by a node of a computing environment to reach a service of said computing environment (see col.6, lines 37-43), said creating using a predefined equation (see col.5, lines 58-63) to order a plurality of service addresses having the same ordering criterion (see col.6, lines 43-45), said predefined equation balancing use of said plurality of service addresses among said node and at least one other node of said computing environment (see col.3, lines 14-26; col.5, lines 63-65; and col.7, lines 21-43); and using said ordered list by said node to reach said service, wherein said ordered list is ordered specifically for said node (col.5, line 64 to col.6, line 15) .

As per claims 18, 40, and 66, Christensen teaches a method, a system, and at least one program storage device readable by a machine tangibly embodying at least one program of instructions executable by the machine to perform a method, of providing ordered lists of service addresses (see col.24, lines 14-15), comprising: ordering a list of a plurality of service addresses according to an ordering criterion, said ordered list being ordered for a specific node (see col.5, lines 44-48; col.5, line 66 to col.6, line 1; and col.6, lines 3-9); and for at least one set of service addresses of said plurality of service addresses having a same value for the ordering criterion, selecting an order for the service addresses of the set, said selecting being based at least in part on workload distribution (see col.3, lines 16-18 & 31-34; and col.6, lines 13-15).

As per claim 47, Christensen teaches a system of providing ordered lists of service addresses, said system comprising: at least one node of a computing environment to create an ordered list of service addresses (see col.24, lines 14-15) to be ordered specifically for and used by a node of the computing environment to reach a service of said computing environment (see col.2, lines 60-63), the creating using a predefined equation (see col.5, lines 58-63) to order a plurality of service addresses having the same ordering criterion (see col.6, lines 43-45), said predefined equation balancing use of said plurality of service addresses among said node to use the ordered list and at least one other node of said computing environment (see col.3, lines 14-26; col.5, lines 63-65; and col.7, lines 21-43).

As per claim 48, Christensen teaches a system of providing ordered lists of service addresses (see col.24, lines 14-15), said system comprising: at least one node to order a list of a plurality of service addresses according to an ordering criterion (see col.6, lines 43-45), said ordered list being ordered for a specific node (see col.6, lines 37-43); and at least one node to select, for at least one set of service addresses of said plurality of service addresses having a same value for the ordering criterion, an order for the service addresses of the set, the selecting being based at least in part on workload distribution (see col.3, lines 16-23).

DEPENDENT:

As per claims 4, 26, and 52, Christensen further teaches wherein said ordering criterion comprises distance from said node to a plurality of servers corresponding to said plurality of service addresses (see col.6, lines 13-15).

As per claims 5, 27, and 53, Christensen further teaches wherein said predefined equation is based at least in part on the number of said plurality of service addresses having the same ordering criterion and a node number of said node (see col.7, lines 1-20).

As per claims 6, 28, and 54, Christensen further teaches wherein said creating comprises ordering said service addresses based on distance from the node to servers of said service addresses (see col.6, lines 13-15).

As per claims 7, 29, and 55, Christensen further teaches wherein said ordering based on distance comprises ordering based on lowest distance (see col.6, lines 13-15: "geography"). It would be inherent that lowest distance would be selected first since Christensen teaches of improving "availability, performance and scalability of the service providers" (see col.3, lines 8-11), wherein distance is a time factor in communication.

As per claims 12, 34, and 60, Christensen further teaches wherein said service comprises a system registry service (see col.1, lines 13-16).

As per claims 13, 35, and 61, Christensen further teaches wherein said creating, is performed by a distributed configuration manager of said computing environment (see col.6, lines 37-40).

As per claims 14, 36, and 62, Christensen further teaches wherein-said distributed configuration manager provides said ordered list to one or more nodes of said computing environment (see col.6, lines 40-42).

As per claims 15, 16, 37, 38, 63, and 64, Christensen teaches of further comprising maintaining said ordered list comprising updating said ordered list in response to a change in the service addresses of said list (see col.6, lines 16-40 and col.7, lines 47-49).

As per claims 17, 39, and 65, Christensen further teaches wherein said maintaining is performed by at least one distributed configuration manager of said computing environment (see col.6, lines 37-40).

As per claims 19, 41, and 67, Christensen further teaches wherein said selecting comprises: indexing the service addresses of the set in a chosen order providing a set of indices corresponding to

the service addresses of the set (see col.16, lines 35-47); and determining an order for the plurality of indices, said order to represent the order of the service addresses of the set (see col.11, lines 48-49 and col.24, lines 14-15).

As per claims 21, 43, and 69, Christensen further teaches wherein said determining comprises using an equation to determine the order (see col.5, lines 58-63), said equation being based at least in part on the number of said service addresses (see col.8, lines 27-28) of said set and a node number of the specific node (see col.6, lines 16-23).

As per claims 23, 45, and 71, Christensen further teaches wherein said ordering criterion is based on distance from said node to a plurality of servers corresponding to said plurality of service addresses (see col.6, lines 13-15).

As per claims 24, 46, and 72, Christensen further teaches wherein said ordering criterion comprises a lowest distance from said node to the plurality of servers (see claim 7 rejection above).

As per claims 49 and 50, Christensen further teaches wherein said at least one node to order is same or different from said at least one node to select (PMM orders and PCC coordinator selects: see col.6, lines 34-43 and any PMM may be elected PCC coordinator: see col.8, lines 32-34).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 20, 42, and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christensen et al. (U.S. 6330605 B1). As per claims 20, 42, and 68, Christensen does not teaches wherein the chosen order is ascending order of service addresses. However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The ordering of service addresses so that service is prioritized to functionally improve "availability, performance, and scalability of the service provider" (see col.3, lines 8-10) would be performed the same regardless whether the order was ascending and read from top-down or descending and read from bottom-up. Thus this ordering preference will not distinguish the claimed invention from prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowery*, 32F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to elect to prioritize ascending or descending so long as the functional objectives were met, because the subjective implementation does not patentably distinguish the claimed invention.

Allowable Subject Matter

5. Claims 8-11, 22, 30-33, 44, 56-59, and 70 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

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As per claims 8, 30, and 56, prior art of records Christensen et al. (U.S. 6330605 B1) does not disclose, teach, or suggest the claim limitation of wherein said predefined equation comprises: $(((a \text{ number of said node}) \bmod (\text{number of said plurality of service addresses-having the same ordering criterion}) + k) \bmod (\text{number of said plurality of service addresses having the same ordering criterion}))$, wherein mod is an integer remainder of a division operation, and k is set to a selected value.

Claims 9, 31, and 57 depend on claims 8, 30, and 56 respectively, therefore would be allowable if the above-mentioned correction was made.

Claims 10, 32, and 58 depend on claims 8, 30, and 56 respectively, therefore would be allowable if the above-mentioned correction was made.

Claims 11, 33, and 59 depend on claims 10, 32, and 58, which depend on claims 8, 30, and 56 respectively, therefore would be allowable if the above-mentioned correction was made.

As per claims 22, 44, and 70, prior art of records Christensen et al. (U.S. 6330605 B1) does not disclose, teach, or suggest the claim limitation of wherein said equation comprises: $(((\text{node number}) \bmod (\text{number of said service addresses of the set}) + k) \bmod (\text{number of said service addresses of the set}))$, wherein mod is an integer remainder of a division operation, and k is set to a selected value.

Conclusion

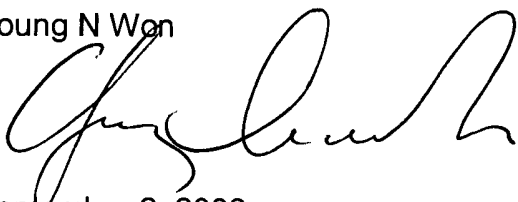
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Young N Won whose telephone number is 703-605-4241. The examiner can normally be reached on M-Th: 8AM-6PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T Alam can be reached on 703-308-6662. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Young N Won



September 3, 2003



HOSAIN ALAM
ASSISTANT PATENT EXAMINER